80 SERIES

Advanced Remote Starters & Vehicle Security Systems



ΙМ

INSTALLATION GUIDE

The manual cover's the operation of the 1280, 2280, 3280, 3285, 4280 and 4285 Series Remote Starters and Alarm Starters (Including manual transmission models)

www.ultrastarters.com

Note: Some features may not be available on certain models.

FCC ID NOTICE

This device complies with Part 15 of the FCC rules. Operation is subject to the following conditions:

1. This device may not cause harmful interference, and

2. This device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Changes or modifications not expressly approved by the part responsible for compliance void the user's authority to operate this devise.

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QUICK VIEW WIRE DIAGRAM

INSTALL MANUAL

	_	
OUTPUT TO ACTIVATE THE VEHICLES STARTER CIRCUIT	YELLOW	
OUTPUT TO ACTIVATE THE VEHICLES ACCESSORY CIRCUIT	GREEN	
12VOLT/ 30 AMP MAIN POWER INPUT	RED	
12VOLT/ 30 AMP MAIN POWER INPUT	RED	
SELECTABLE OUTPUT* (DEFAULT 2ND IGN)	WHITE*	= 5 =
OUTPUT TO ACTIVATE THE VEHICLES IGNITION CIRCUIT	BLUE) 6 💆
	Υ	
(+) SIREN OUTPUT / (-) HORN OUTPUT	BROWN**	
(-) STARTER KILL/ ANTI-GRIND OUTPUT	ORANGE) 2 1
SELECTABLE PARK LIGHT OUTPUT (DEFAULT POSITIVE)	WHITE) 4 3
SYSTEM GROUND INPUT	BLACK	
	Y	
REARM OUTPUT (PULSE WITH LOCK & AFTER START)	YELLOW) 1
DISARM OUTPUT (PULSE WITH UNLOCK & BEFORE START)	BROWN) 2 🗀 📗
NEGATIVE SECOND START OUTPUT	GRAY) з 🗀
AUXILIARY OUTPUT TO ACTIVATE TRUNK RELEASE	RED/WHITE) 4 🗁
(-) 2ND ACCESSORY/ PROGRAMMABLE AUXILIARY 2 OUTPUT	ORANGE/WHT) 5 🗀
AUXILIARY 1 OUTPUT/ PROGRAMMABLE OUTPUT.	WHT/VIOLET) 6 🗀 📗
BRAKE SWITCH INPUT (12VOLT WHEN BRAKE IS PRESSED)	PINK) 7 🗀
PARK BRAKE INPUT (-) ("M" SERIES ONLY)	BLK/WHT***) 8 🗀
HOOD PIN SWITCH (GROUND WHEN HOOD IS OPENED)	GRN/WHITE) 9 ⊨
TACH DETECTION INPUT (CONNECT TO COIL, INJECTOR)	BLUE/WHITE) 10 🗁
DIESEL WAIT TO START (+ OR - INPUT) PROGRAMMABLE	BLUE) 11 🗁
POSITIVE DOOR INPUT (+ WHEN DOOR OPENED)	PURPLE****) 12
NEGATIVE DOOR INPUT (- WHEN DOOR OPENED)	GREEN****) 13
Status Led's Program Button		

^{*} The selectable output can be changed in the program mode to output as a 2nd Accessory or 2nd Start output. Default output is second ignition. **This output does not change back to 2nd Ignition upon reset**

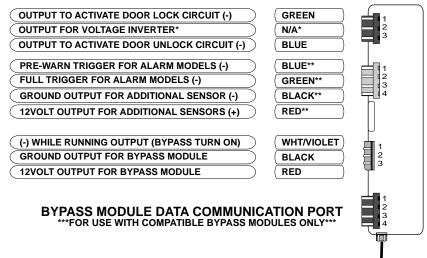
THE DOOR DIN CONNECTION MUST BE CONNECTED FOR PASSIVE ARMING ON THE 1280 and 3285.

^{**}Siren output on alarm models and horn honk output on starter models.

^{***}A "M" series remote starter must be used when installing on a manual transmission vehicle. **NEVER**INSTALL AN AUTOMATIC REMOTE START IN A MANUAL VEHICLE!!

^{****} The door pin connections are used on Manual Transmission and Alarm Models Only.

QUICK VIEW WIRE DIAGRAM



THERMISTOR/INPUT TRIGGER TO START

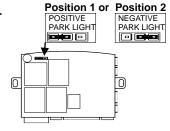
* THE CENTRE PIN OF THE KEYLESS CONNECTOR IS LOW CURRENT AND IS DESIGNED TO SUPPLY POWER TO DOOR LOCK MODULES (DO NOT CONNECT TO RELAYS) OVERLOADING THIS OUTPUT WILL DAMAGE THE MODULE!

**THIS CONNECTOR IS USED FOR ALARM MODELS ONLY.

*** FOR USE WITH COMPATIBLE BYPASS MODULES ONLY.

SELECTABLE PARK LIGHT OUTPUT

BY DEFAULT THE SYSTEM COMES WITH THE PARK LIGHT JUMPER SET FOR POSITIVE PARK LIGHT OUTPUT. TO CHANGE THE SYSTEM TO A NEGATIVE PARK LIGHT OUTPUT, PLACE THE JUMPER IN THE NEGATIVE PARK LIGHT POSITION SHOWN IN THE DIAGRAM. (Position 2)



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MANUAL TRANSMISSION MODELS

INSTALL MANUAL

MANUAL TRANSMISSION

*****YOU MUST INSTALL A "M" SERIES REMOTE START WHEN INSTALLING ON A MANUAL TRANSMISSION VEHICLE*****

Connect the following wires for manual transmission vehicles:

PARK BRAKE INPUT FOR MANUAL TRANSMISSIONS

BLK/WHT

Connect this wire to the vehicles Park Brake Switch. The wire should test negative when the park brake is applied only.

POSITIVE DOOR PIN INPUT (ALARMS AND MANUAL ONLY) PURPLE

Connect this wire to the door pin switch if it changes to 12volts when the door is opened.*

NEGATIVE DOOR PIN INPUT (ALARMS AND MANUAL ONLY) GREEN

Connect this wire to the door pin switch if it changes to Negative when the door is opened.*

*Test the vehicles door pin circuit then connect to the appropriate door pin input from the remote start. (Green or Purple)

CLUTCH BYPASS

In order for the vehicle to start, it will be necessary to duplicate the function of the clutch switch. Carefully test the wires to determine the activation type. Below are the 4 clutch switch types.

- **Type 1 Starter Wire Bypass -** The start wire travels form the key switch through the clutch switch to the starter motor. Connect Starter Output wire directly to the starter motor side of the clutch switch.
- **Type 2 Negative (High Current) -** This switch grounds the factory starter relay and allows the vehicle to start. Connect a relay to ground the output side of the clutch switch wire when the remote starter is activated. The starter wire is connected at the ignition switch.
- **Type 3 Connect Switch -** Install a relay to connect the two wires at the switch when the remote starter is activated. The starter wire is connected at the ignition switch.
- **Type 4 Disconnect Switch** Install a relay to disconnect one of the wires at the clutch switch. The starter wire is connected at the ignition switch.
- ***Testing is critical! Never connect to a circuit if you are not sure of it's operation. Contact your dealer or technical support for more information.***

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INSTALL MANUAL

QUICK VIEW PROGRAMMING

ENTERING PROGRAM MODE

1 - Cycle the Ignition Key On/Off On/Off On (Leaving the key ON)

2 - Press and release the Program Switch 1 time. (Horn/ Siren will chip to confirm program mode entered)

3 - Select the Program Menu by pressing...

Press Lock Press Unlock Press Start Press #

MENU 1 MENU 2 MENU 3 MENU 4

4 - Press and Release the Program Switch to advance through the settings.

(Confirmed by Horn/ Siren chirps & LED flashes)

5 - Press and hold the Program Switch to change the setting.

(Confirmed by Horn/ Siren Chirps)

6 - To exit Program Mode, turn the key off.

(Confirmed by Long Horn/ Siren Chirp)

SYSTEM RESET

- 1 Cycle the Ignition Key On/Off On/Off On (Leaving the key ON)
- 2 Press and RELEASE the Program Switch 1 time.

(Horn/ Siren will chip to confirm program mode has been entered)

- 3 Press and HOLD the Program Switch for 5 seconds or until the Horn/ Siren Chirps 3 times.
- 4 Turn the ignition key OFF to exit.

TRANSMITTER PROGRAMMING

- 1 Cycle the Ignition Key On/Off On/Off On (Leaving the key ON)
- 2) Press and HOLD the Program Switch

(The Horn/ Siren will chirp 1 time, CONTINUE to HOLD)

If the Horn/ Siren does not chirp turn the key off, then repeat step 1

- 3) Continue to HOLD the Program Switch and the Horn/ Siren will chirp 5 times.
- 4) Press the **LOCK BUTTON** on each of the remote's to be programmed.
 - *Pause for about 1 second between programming of each remote System can accept up to a maximum of 4 remote's
- 5) The park lights will flash once and the Horn/ Siren will chirp once each time a new code is learned.
- 6) Release the Program switch and turn Ignition OFF.



PROGRAM MODE 1

PROGRAM MODE 1 - see page 16 for detailed instructions

SETTING # LED FLASHES	SETTING DESCRIPTION	OPTION 1 1 CHIRP	OPTION 2 2 CHIRPS	OPTION 3 3 CHIRPS
1	IGNITION AUTO-LOCK	IGNITION AUTO-LOCK / UNLOCK	IGNITION AUTO-LOCK ONLY	IGNITION AUTO-LOCKS DISABLED
2	HORN / SIREN SETTINGS	HORN / SIREN CHIRPS DISABLED	HORN/SIREN CHIRPS ENABLED	
3	DOOR LOCK PULSE OPTIONS	DOUBLE UNLOCK & SINGLE LOCK	DOUBLE LOCK & SINGLE UNLOCK	SINGLE LOCK & SINGLE UNLOCK
4	DOOR LOCK / UNLOCK PULSES	0.25 SEC PULSES	3 SEC PULSES	0.75 SEC PULSES
5	AUX CHANNEL 1	(-) IGNITION CAR FINDER ON # *	DOME LIGHT CAR FINDER ON # *	# AUX 1 OUTPUT WITH DISARM*
6	AUX CHANNEL 2	AUX OUTPUT (2&3) WITH DISARM	2ND UNLOCK	(-) ACCESSORY OUTPUT
7	PASSIVE DOOR LOCKS	PASSIVE DOOR LOCKS DISABLED	PASSIVE DOOR LOCKS ENABLED	
8	PASSIVE ARMING/ PASSIVE ST. KILL	FULL PASSIVE ARMING ENABLED	PASSIVE SAFETY REARM ENABLED	ACTIVE ARMING ONLY
9 ALARM	SHOCK / AUX SENSOR	INTERNAL SHOCK DISABLED	AUX SENSOR DISABLED	BOTH SENSORS ENABLED

* Car Finder Mode and the Auxiliary 1 output are not available on 2way models.



PROGRAM MODE 2 - see page 19 for detailed instructions

SETTING # LED FLASHES	SETTING DESCRIPTION	OPTION 1 1 CHIRP	OPTION 2 2 CHIRPS	OPTION 3 3 CHIRPS
1	VALET SETTINGS	SECURE VALET 15 SECONDS	STANDARD VALET	
2	PARK-LIGHT OUTPUT	30 SECONDS ON DISARM	NORMAL OPERATION	
3	HORN TIMING	5MS OUTPUT	50MS OUTPUT	10MS OUTPUT * 30ms ON ALARM
4 ALARM	SIREN OPTIONS	30 SECOND DURATION	PULSED FOR HORN	60 SECOND DURATION
5 M-UNITS	RESERVATION MODE	PRESS BRAKE 2 TIMES TO ACTIVATE	PRESS # TO ACTIVATE	

QUICK VIEW PROGRAMMING



PROGRAM MODE 3 - see page 21 for detailed instructions

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SETTING # LED FLASHES	SETTING DESCRIPTION	OPTION 1 1 CHIRP	OPTION 2 2 CHIRPS	OPTION 3 3 CHIRPS
1	SELECTABLE RELAY	2ND STARTER	2ND ACCESSORY	2ND IGNITION
2	SPECIAL DOOR LOCK OPTIONS	UNLOCK BEFORE / LOCK AFTER START	LOCK AFTER STARTER SHUT OFF	NO ADDITIONAL PULSES
3	GAS / DIESEL MODE	NEG GLOW PLUG / 30 SEC DELAY	15 SECOND DELAY	GAS / POSITIVE GLOW PLUG
4	RE-ARM OPTIONS	PULSE WITH LOCK	PULSE AFTER START (DEFROST / SEAT)	PULSE WITH LOCK & AFTER SHUTDOWN
5	RUNTIME	4 MINUTE RUNTIME	45 MINUTE RUNTIME	15 MINUTE RUNTIME
6	REMOTE START ACTIVATION	PRESS BUTTON TWICE TO START	PRESS BUTTON ONCE TO START	
7	LED FLASHES	LEDS DO NOT FLASH WHEN LOCKED/ ARMED	LEDS FLASH WHEN LOCKED/ ARMED	



PROGRAM MODE 4 - see page 23 for detailed instructions

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SETTING # LED FLASHES	SETTING DESCRIPTION	OPTION 1 1 CHIRP	OPTION 2 2 CHIRPS	OPTION 3 3 CHIRPS
1	TACH OPTIONS	HYBRID MODE	AUTO TACH / TACHLESS	
2	ADJUST FOR OVER- CRANK	INCREASES TACH SETTING BY 10%		
3	ADJUST FOR UNDER- CRANK	DECREASE TACH SETTING BY 10%		
4	TACH WAIT SETTINGS	300ms TACH CHECK DELAY	750ms TACH CHECK DELAY	NO TACH CHECK DELAY

TACH LEARNING

When the installation is complete start the vehicle with the key. To confirm that a proper Tach signal has been programmed the system will chirp the Horn/ Siren and flash the park lights two times. If the tach wire is not connected the park lights will flash and the horn will chirp 4 times to indicate Tachless Mode. For more information see the following page for special notes regarding the Tach Learning procedure.

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TACH / TACHLESS LEARNING

INSTALL MANUAL

AUTO TACH/ TACHLESS LEARNING



Start the vehicle with the ignition key.



Horn/ Siren will chip to confirm that the Tach/ Tachless has been programmed.

To Tach/ Tachless Learn the system simply start the vehicle with the ignition key. To confirm that a proper Tach signal has been programmed the system will chirp the Horn/ Siren and flash the park lights two times. If the tach wire is not connected the park lights will flash and the horn will chirp 4 times to indicate Tachless Mode. If the Tach is not learned when the start button is pressed the park lights will flash 7 times.

The system must be Tach Learned before remote starting

MANUAL TACH/ TACHLESS LEARNING



Hold the brake



Start the vehicle with the ignition key.



Horn/ Siren will chip to confirm that the Tach/ Tachless has been programmed.

For vehicles with no 12volt START wire

Many new GM vehicles do not have a 12volt start wire that the remote start is connected to. To Tach learn the system **Press and Hold** the brake pedal, **Start the vehicle** with the key then **press and release** the program button then **hold for 5 seconds**. To confirm that a proper Tach signal has been programmed the system will chirp the Horn/ Siren and flash the park lights two times. If the tach wire is not connected the park lights will flash and the horn will chirp 4 times to indicate Tachless Mode. If the Tach is not learned when the start button is pressed the park lights will flash 7 times.

The system must be Tach Learned before remote starting

TACH NOTES

- * If Tach does not learn check for proper connection on the starter wire, ignition wire and at the Tach connection. If the connections are good, reset the system and try again.
- -For best results connect the Tach wire to a fuel injector wire.
- * If the vehicle does not start when the remote starter is activated, the park lights will flash a diagnostic code. (See Diagnostic Chart).
- **If the vehicle still does not start, check all connections and check for a factory installed Anti-Theft system. If the Anti-Theft prevents the vehicle from starting the remote start will flash the park lights 7 times. The system does not have to be Tach learned if this happens, simply start the vehicle with the key and let it run for 5 seconds then turn off.

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INSTALL MANUAL

SYSTEM WIRING DETAILS

6-PIN CONNECTOR

OUTPUT TO ACTIVATE START CIRCUIT	YELLOW	
OUTPUT TO ACTIVATE ACCESSORY/ HEATER CIRCUIT	GREEN	
30A HIGH CURRENT 12VOLT INPUT	RED	
30A HIGH CURRENT 12VOLT INPUT	RED	
SELECTABLE OUTPUT (DEFAULT SECOND IGNITION)	WHITE*	
OUTPUT TO ACTIVATE IGNITION CIRCUIT	BLUE	

4-PIN CONNECTOR

(+) SIREN/ HORN OUTPUT (-)	BROWN	
STARTER-KILL/ ANTI-GRIND OUTPUT	ORANGE	
JUMPER SELECTABLE PARK LIGHT OUTPUT (+ OR -)	WHITE	
SYSTEM GROUND INPUT	BLACK	

4 PIN AUXILIARY SENSOR CONNECTOR

NEGATIVE OUTPUT FOR UNLOCK	GREEN	
12+ OUTPUT FOR DOOR LOCK MODULE		
NEGATIVE OUTPUT FOR UNLOCK	BLUE	

FOR MORE DETAILED INFORMATION ON PROGRAMMING, WIRING DIAGRAMS, DOOR LOCK CONFIGURATION AND OTHER INFORMATION, PLEASE VISIT WWW.ULTRASTARTERS.COM/DIAGRAMS

SYSTEM WIRING DETAILS

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INSTALL MANUAL

PIN-1 YELLOW Starter Output-This wire will test 0V when the key is off, in the Accessory position and when the Ignition is in the on position. The starter wire is 12volts during the start/ crank position only.

PIN-2 GREEN Heater/Acc Output-This wire will test 0V when key is off, 12volts in the ACC and iIGN

positions and off during start/ crank position.

PIN-3 RED

12volt Input(30amp)- This input supplies the 12volt power for the Ignition, Park Lights and the Selectable outputs.

PIN-4 RED

12volt Input(30amp)- This input supplies the 12volt power for the Accessory and Starter

outputs.

PIN-5 BLUE Ignition Output- This wire will test 0V in the off and Accessory positions the switch to12volts

in the Ignition and Start positions.

PIN-6 WHITE Selectable Output - 2nd Ignition, Accessory or Start output. Programmable. (See Page 21).

Note: This output does not switch to default when the system is reset.

PIN-1 BROWN (+) Siren / (-) Horn (Programmable)- Connect this wire to the Brown or Red wire on the SIREN (Alarm Models) This output can be programmed to act as an additional HORN output (+)

PIN-2 ORANGE Starter Kill/ Anti-Grind- This wire can be connected to an additional relay to disable the start circuit when the lock button is pressed. The output will also stay on when remote started, this will prevent the starter motor from being re-engaged while the vehicle is running.

PIN-3 WHITE Jumper Selectable Park Light Output (+ or -)- Connect to the vehicles positive park light wire or change the jumper and connect to the vehicle negative park light wire. The default position of the jumper is Positive Park light Output.

PIN-4 BLACK System Ground Input- Connect to chassis ground.

PIN 1- GREEN Wire- Negative Lock Output

Connect to lock wire from the switch on vehicles with a negative type switch. **LOW CURRENT ONLY**

PIN 2- 12volt Output for Door Lock Module

This output will supply 12volts for a plug-in type door lock module. Do not use this input to power-up relays **LOW CURRENT ONLY**

PIN 3- BLUE Wire- Negative Unlock Output

Connect to lock wire from the switch on vehicles with a negative type switch. **LOW CURRENT ONLY**

SEE PAGE 24 FOR RELAY DIAGRAMS

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SYSTEM WIRING DETAILS

13 PIN CONNECTOR **OUTPUT FOR FACTORY ALARM RE-ARM** YELLOW **OUTPUT FOR FACTORY ALARM DIS-ARM BROWN NEGATIVE STARTER OUTPUT GRAY OUTPUT FOR TRUNK RELEASE ACTIVATION** RD/WHT **NEGATIVE ACCESSORY OUTPUT/ AUXILIARY OUTPUT 2** ORG/WHT **AUXILIARY OUTPUT 1/ PROGRAMMABLE OUTPUT** WHT/ORG BRAKE SWITCH INPUT (+) WHEN BRAKE IS PRESSED **PINK** PARK BRAKE INPUT FOR MANUAL TRANSMISSIONS BLKWHT HOOD PIN SWITCH INPUT GRN/WHT TACH WIRE INPUT BLUE/WH WAIT TO START (DIESEL VEHICLES) BI UF POSITIVE DOOR PIN INPUT (ALARMS AND MANUAL ONLY) **PURPLE NEGATIVE DOOR PIN INPUT (ALARMS AND MANUAL ONLY) GREEN**

SYSTEM WIRING DETAILS

INSTALL MANUAL

1-YELLOW Re-arm(-) (Programmable)

Supplies one .75 second pulse when locked and one .75 second pulse after remote start shutdown. Factory alarm re-arm/ RAP shutdown.

2-BROWN Dis-arm(-)

Supplies one .75 second pulse when the unlock button is pressed and one .75 second pulse before remote start activation. For factory alarm dis-arm/ "wake up".

3-GRAY (-) Start/ Crank

Supplies a ground output at the same time as the positive starter output.

4-RED/WHITE Trunk Release(-) (Programmable)

Output will activate when the Unlock button is held for at least 3 seconds. The output will stay on for 5 seconds or until the button is released

5- ORG/WHT 2nd Acc (-) / Auxiliary Output 2 (Programmable)

Ground output at the same time as the primary Accessory, output. This output can be programmed to activate as and auxiliary output when the unlock and start buttons are held.

6- WHT/VIOLET Auxiliary Output 1/ Programmable Output

Auxiliary output when the # button is held. Programmable to (-) Ignition/ Car Finder and Dome Light Supervision with Car Finder. (Car Finder and Auxiliary 1 are not available on 2way models)

7- PINK Brake Switch input (+)

This wire must be connected to the wire at the brake switch that changes to 12volts when the brake is pressed.

8- BLACK/WHT Park Brake Input (-)

On manual transmission models this wire must be connected to the vehicles park brake wire. Never install a automatic remote start in a manual vehicle!

9- GREEN/WHT Hood Pin Input (-)

Connect this wire to the supplied hood pin switch. If ground is detected on this input the remote starter will not activate.

10- BLUE/WHT Tach Wire Input (A/C)

This wire is used to to detect when the vehicle has started. The Tach source is typically taken from a fuel injector, coil, coil pack or crank position sensor. The Tach wire is generally found as the opposite from the common wire at the coil or fuel injector.

11- BLUE Wait to Start Input (+ or -) (Programmable)

On diesel vehicles connect this wire to the wait to start or glow plug wire. The system will wait for the input to turn off then remote start. A start delay may also be programmed to avoid this connection.

12- PURPLE Positive Door Input (+)

This wire is used on manual transmission and alarm models only. Connect this wire to the door pin switch if it changes to 12volts when the door is opened. *Connect to door pin for Passive Arming on 1280 and 3285.

13- GREEN Negative Door Input (+)

This wire is used on manual transmission and alarm models only. Connect this wire to the door pin switch if it changes to Negative when the door is opened. *Connect to door pin for Passive Arming on 1280 and 3285.

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INSTALL MANUAL

SYSTEM WIRING DETAILS

4 PIN AUXILIARY SENSOR CONNECTOR*

*ALARM MODELS ONLY

PRE-WARN TRIGGER

FULL TRIGGER INPUT

GROUND OUTPUT FOR AUXILIARY SENSOR

12VOLT OUTPUT FOR AUXILIARY SENSOR

RED

1- BLUE Pre-Warn Trigger (-) Input

When this wire is grounded by an auxiliary sensor (i.e: Radar Sensor) the system will chirp the SIREN 3 times.

2- GREEN Full Alarm Trigger (-) Input

When this wire is grounded by an auxiliary sensor (i.e. Radar Sensor) the alarm will activate for up to 60 sec.

3- BLACK Sensor Ground Output (-)

This wire provides a ground output for the auxiliary sensor.
4- RED Sensor 12volt Output (+)

This wire provides a 12volt output for the auxiliary sensor.

3 PIN BYPASS CONNECTOR

GROUND WHEN RUNNING OUTPUT WHITE/VIOLET
SYSTEM CHASSIS GROUND INPUT
CONSTANT 12 VOLT INPUT (20AMP)
RED

1- WHITE/VIOLET Wire-Ground When Running (-)

Connect this wire to the your bypass modules negative turn on wire. When the remote starter is activated this wire will switch to ground.

2- BLACK Wire- System Ground (-)

Connect this wire to the ground input on the bypass module.

3- RED Wire- 12volt Power Input (+)

Connect this wire the 12volt input on the bypass module.

4 PIN DATA BYPASS

DATA LINK CONNECTOR - FOR USE WITH COMPATIBLE BYPASS MODULES ONLY

2 PIN THERMISTOR/ START TRIGGER

Input trigger to start

The remote starter will activate when this wire is pulsed with ground.

*Available with plug-in thermistor for temperature start on LT models.

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PROGRAM MODE

INSTALL MANUAL

ENTERING PROGRAM MODE

1 - Cycle the Ignition Key On/Off On/Off On (Leaving the key ON)

- 2 Press and release the Program Switch 1 time. (The park lights will turn on and the HORN will chip to confirm that program mode was entered)
- 3 Select the Program Menu by pressing...

Press Lock

Press Unlock

Press Start

Press #

MENU 1

MENU 2

MENU 3

MENU 4

SELECT AND CHANGE

4 - Press and Release the Program Switch to advance through the settings.

(Confirmed by HORN/ SIREN chirps & LED flashes)

5 - Press and hold the Program Switch to change the setting.

(Confirmed by HORN/ SIREN Chirps)

6 - To exit Program Mode, turn key off.

(Confirmed by Long HORN/ SIREN Chirp)

SYSTEM RESET

- 1 Cycle the Ignition Key On/Off On/Off On (Leaving the key ON)
- 2 Press and RELEASE the Program Switch 1 time.

(HORN/ SIREN will chip to confirm that program mode was entered)

- 3 Press and HOLD the Program Switch for until the HORN/SIREN Chirps 3 times.
- 4 Turn ignition key OFF to exit.

TRANSMITTER PROGRAMMING

- 1 Cycle the Ignition Key On/Off On/Off On. (Leaving the key ON)
- 2) Press and HOLD the Program Switch.

(The HORN/ SIREN will chirp 1 time, CONTINUE to HOLD)

If the HORN/ SIREN does not chirp turn the key off, then repeat step 1

- 3) Continue to <u>HOLD</u> the Program Switch and the HORN/ SIREN will chirp 5 times.
- 4) Press the **LOCK BUTTON** on each of remote's to be programmed.

*Pause for about 1 second between programming of each remote.

System can accept 4 remote's max.

- 5) The park lights will flash once and the HORN/SIREN will chirp once each time a new code is learned.
- 6) Release the Program switch and turn Ignition OFF.

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INSTALL MANUAL

PROGRAM MODE

ENTERING PROGRAM MODE 1



ON/OFF - ON/OFF - ON (Leaving the key ON)

PROGRAM SWITCH

Press and release 1 time

SIREN CHIRP

1 CHIRP Confirming **Program Mode**

REMOTE BUTTON



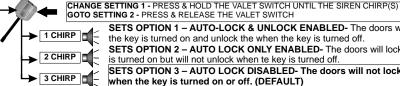


THE SIREN WILL CHIRP 1 TIME WHEN SETTING 1 IS SELECTED









SETS OPTION 1 - AUTO-LOCK & UNLOCK ENABLED- The doors will lock when the key is turned on and unlock the when the key is turned off.

SETS OPTION 2 - AUTO LOCK ONLY ENABLED- The doors will lock when the key is turned on but will not unlock when te key is turned off.

SETS OPTION 3 – AUTO LOCK DISABLED- The doors will not lock or unlock when the key is turned on or off. (DEFAULT)

SETTING 2-HORN/ SIREN OUTPUT

PRESS 1 TIME THE SIREN WILL CHIRP 2 TIMES WHEN SETTING 2 IS SELECTED CHANGE SETTING 2 - PRESS & HOLD THE VALET SWITCH UNTIL THE SIREN CHIRP(S)









GOTO SETTING 3 - PRESS & RELEASE THE VALET SWITCH SETS OPTION 1 - HORN/ SIREN DISABLED- The HORN and SIREN and will activate with Panic and Car Finder Mode only.

> SETS OPTION 2 - HORN/ SIREN OUTPUT- The HORN and the SIREN* (alarm models) output will activate for all functions. (DEFAULT)

SETTING 3-DOOR LOCK PULSES
THE SIREN WILL CHIRP 3 TIMES WHEN SETTING 3 IS SELECTED







CHANGE SETTING 3 - PRESS & HOLD THE VALET SWITCH UNTIL THE SIREN CHIRP(S) GOTO SETTING 4 - PRESS & RELEASE THE VALET SWITCH

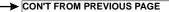
SETS OPTION 1 - DOUBLE UNLOCK & SINGLE LOCK PULSE- The system will 1 CHIRP provide 2 unlock pulses w/unlock and 1 lock pulse w/lock.

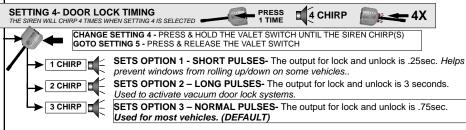
SETS OPTION 2 - DOUBLE LOCK & SINGLE UNLOCK PULSE- The system will provide 2 lock pulses and 2 unlock pulses.

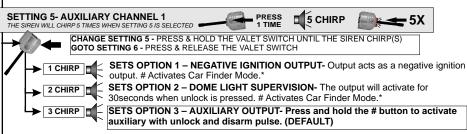
SETS OPTION 3 - NORMAL OPERATION- The system will pulse once for lock and once for unlock. (DEFAULT)

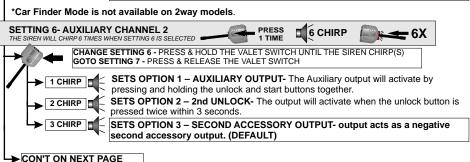
CON'T ON NEXT PAGE

2 CHIRP

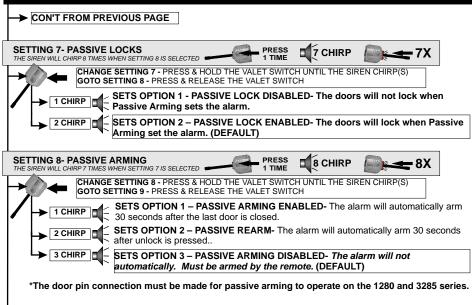


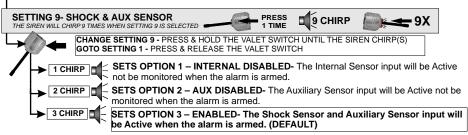






PROGRAM MODE





*ALARM MODELS ONLY

ENTERING PROGRAM MODE 2







Press and release 1 time

SIREN CHIRP

1 CHIRP Confirming **Program Mode**

1 CHIRP

2 CHIRP

REMOTE BUTTON





CHANGE SETTING 1 - PRESS & HOLD THE VALET SWITCH UNTIL THE SIREN CHIRP(S) GOTO SETTING 2 - PRESS & RELEASE THE VALET SWITCH



SETS OPTION 1 - SECURE- The LED/ Program Switch must be held for 15 seconds to place the system into Valet Mode.

SETS OPTION 2 - STANDARD- The LED/ Program Switch must be held for 5 seconds to place the system into Valet Mode. (DEFAULT)

PRESS

PRESS

SETTING 2-PARK LIGHT OUTPUTS

1 TIME THE SIREN WILL CHIRP 2 TIMES WHEN SETTING 2 IS SELECTED CHANGE SETTING 2 - PRESS & HOLD THE VALET SWITCH UNTIL THE SIREN CHIRP(S)



SETS OPTION 1 - 30 SECOND- The park light output will flash for all functions and will stay active for 30 seconds when unlock is pressed.

SETS OPTION 2 - NORMAL OPERATION- The park lights will flash for all functions. (DEFAULT)

SETTING 3-HORN OUTPUT

THE SIREN WILL CHIRP 3 TIMES WHEN SETTING 3 IS SELECTED







CHANGE SETTING 3 - PRESS & HOLD THE VALET SWITCH UNTIL THE SIREN CHIRP(S) GOTO SETTING 4 - PRESS & RELEASE THE VALET SWITCH

1 CHIRP 2 CHIRP 3 CHIRP

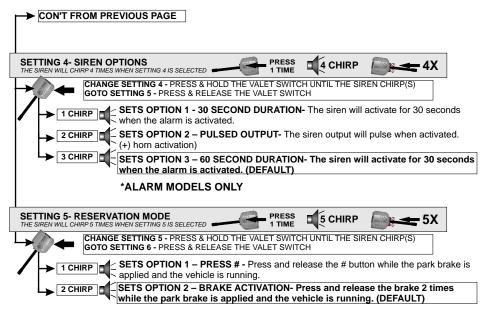
SETS OPTION 1 - SHORT OUTPUT- The HORN output will activate for 5ms when a function is preformed.

SETS OPTION 2 - LONG OUTPUT- The HORN output will activate for 50ms when a function is preformed.

SETS OPTION 3 - NORMAL OUTPUT- The HORN output will activate for 10ms when a function is preformed. (DEFAULT)

CON'T ON NEXT PAGE

PROGRAM MODE



*MANUAL TRANSMISSION MODELS ONLY

ENTERING PROGRAM MODE 3



ON/OFF - ON/OFF - ON (Leaving the key ON)

PROGRAM SWITCH



GOTO SETTING 2 - PRESS & RELEASE THE VALET SWITCH

Press and release 1 time

SIREN CHIRP



REMOTE BUTTON





THE SIREN WILL CHIRP 1 TIME WHEN SETTING 1 IS SELECTED









SETS OPTION 1 - SECOND STARTER- The white wire on the 6-pin connector acts as a Second Starter output.

SETS OPTION 2 -SECOND ACCESSORY- The white wire on the 6-pin connector

acts as a Second Ignition output. (DEFAULT)

acts as a Second Accessory output. SETS OPTION 3 -SECOND IGNITION- The white wire on the 6-pin connector

SETTING 2-SPECIAL DOOR LOCK OPTIONS









SETS OPTION 1 -TYPE 2 - The doors will unlock before remote start, lock when remote starter starts and again when the remote start shuts down.

SETS OPTION 2 - RE-LOCK- The doors will automatically lock when the remote starter shuts down

SETS OPTION 3 - NORMAL OPERATION- No additional door lock or door unlock pulses. (DEFAULT)

SETTING 3-GAS/ DIESEL MODE

THE SIREN WILL CHIRP 3 TIMES WHEN SETTING 3 IS SELECTED

THE SIREN WILL CHIRP 2 TIMES WHEN SETTING 2 IS SELECTED



CHANGE SETTING 2 - PRESS & HOLD THE VALET SWITCH UNTIL THE SIREN CHIRP(S)





CHANGE SETTING 3 - PRESS & HOLD THE VALET SWITCH UNTIL THE SIREN CHIRP(S) GOTO SETTING 4 - PRESS & RELEASE THE VALET SWITCH



 SETS OPTION 1 - NEGATIVE- The system will wait for the negative wait to start input to turn off. (Starter will activate after 30seconds)

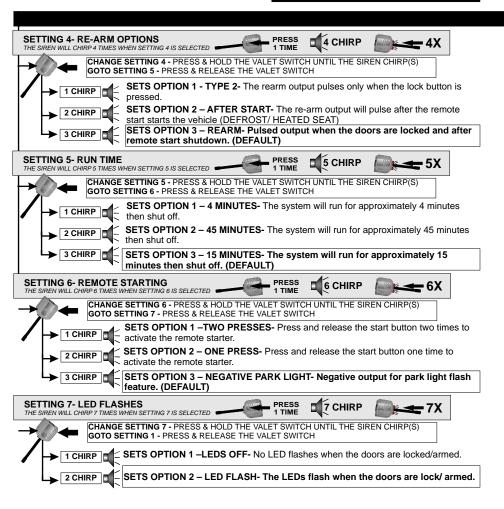
SETS OPTION 2 - 15 SECOND DELAY- The system will wait for 15 seconds before activating the starter motor.

SETS OPTION 3 - GAS/POSITVE- If 12 volts present on the wait to start input the system will wait for up to 30 seconds then start. (DEFAULT)

CON'T ON NEXT PAGE

3 CHIRP

PROGRAM MODE



ENTERING PROGRAM MODE 4





PROGRAM SWITCH

Press and release 1 time

SIREN CHIRP

1 CHIRP Confirming **Program Mode**

REMOTE BUTTON





THE SIREN WILL CHIRP 1 TIME WHEN SETTING 1 IS SELECTED





1 CHIRP



1 CHIRP 2 CHIRP

SETS OPTION 1 - HYBRID 1- The remote starter will ignore the Tach inpit after the remote start activates.

SETS OPTION 2 -AUTO TACH LEARN- The system will automatically learns the vehicles Tach. Tachless on TL Models. (DEFAULT)

SETTING 2-ADJUST FOR UNDER-CRANK











CHANGE SETTING 2 - PRESS & HOLD THE VALET SWITCH UNTIL THE SIREN CHIRP(S) GOTO SETTING 3 - PRESS & RELEASE THE VALET SWITCH

Each time the HORN/ SIREN chirps the Tach setting is reduced by 10%

SETTING 3-ADJUST FOR OVER-CRANK

THE SIREN WILL CHIRP 3 TIMES WHEN SETTING 3 IS SELECTED.









CHANGE SETTING 3 - PRESS & HOLD THE VALET SWITCH UNTIL THE SIREN CHIRP(S) GOTO SETTING 4 - PRESS & RELEASE THE VALET SWITCH

2 CHIRP

3 CHIRP

Each time the HORN/ SIREN chirps the Tach setting is increased by 10%

SETTING 4- TACH WAIT

THE SIREN WILL CHIRP 4 TIMES WHEN SETTING 4 IS SELECTED









CHANGE SETTING 4 - PRESS & HOLD THE VALET SWITCH UNTIL THE SIREN CHIRP(S) GOTO SETTING 1 - PRESS & RELEASE THE VALET SWITCH

> SETS OPTION 1 - 300ms- The system will wait 300ms before starting to monitor the Tach input. SETS OPTION 2 - 750ms- The system will wait 750ms before starting to monitor the

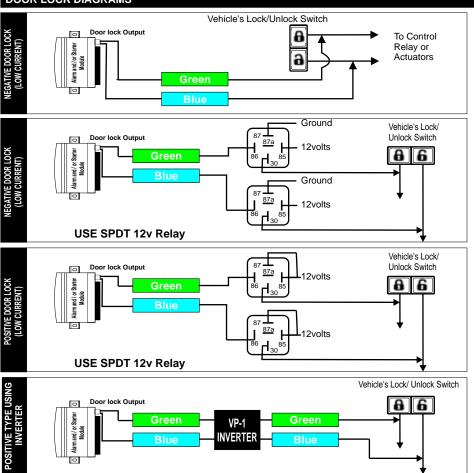
Tach input.

SETS OPTION 3 - NO WAIT- The system will monitor the Tach as soon as the vehicle has remote started. (DEFAULT)

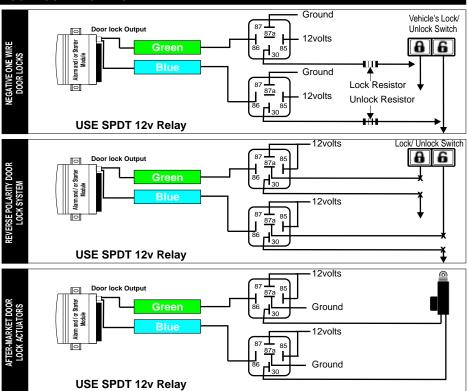
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PAGE 24 INSTALL MANUAL **RELAY DIAGRAMS**

DOOR LOCK DIAGRAMS



DOOR LOCK DIAGRAMS



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SHOCK SENSOR SETTINGS

INSTALL MANUAL

ALARM MODELS ONLY

1 - ENTER SHOCK SENSOR ADJUSTMENT MODE



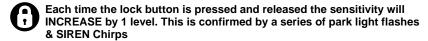
Press & HOLD Lock + Unlock buttons at the same time



Continue to hold the buttons for 3-5 seconds until the SIREN Chirps 3 times

(Note: System will Arm or Disarm via silent arming prior to entering adjustment mode)

2 - ADJUSTING THE SHOCK SENSOR



(1 Flash / Chirp is the least sensitive setting & 10 Flashes / Chirps is the most sensitive)



Each time the unlock button is pressed and released the sensitivity will DECREASE by 1 level. This is confirmed by a series of park light flashes & SIREN Chirps

(1 Flash / Chirp is the least sensitive setting & 10 Flashes / Chirps is the most sensitive)

3 - EXITING SENSOR ADJUSTMENT MODE



Press & HOLD Lock + Unlock buttons at the same time

(NOTE: Shock Sensor Adjustment Mode has an auto time out of 8 seconds)

If the system has been triggered (shock sensor, door input..), the siren will sound for approximately 60 seconds. Press and release the lock or unlock button to silence the siren (the system will remain armed). Press the unlock button to disarm the system. The siren and park lights will flash three times to indicate the system had been triggered.

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QUICK VIEW OPERATIONS

INSTALL MANUAL

QUICK VIEW OPERATION CHART

BUTTON	LENGTH OF PRESS	CHIRPS / FLASHES	SYSTEM OPERATION
()	1 SECOND	1	LOCK / ARM ALARM
	3 SECONDS	1	ACTIVATE PANIC
	1 SECOND (PANIC OR ALARM)	OFF	ALARM/ PANIC OFF
6	1 SECOND	2	UNLOCK / DISARM
	1 SECOND (PANIC OR ALARM)	OFF	ALARM/ PANIC OFF
	HOLD FOR 3 SECONDS	2 + 1	UNLOCK + TRUNK
8	1 SECOND	1	REMOTE START
	1 SECOND WHEN RUNNING	1	EXTENDED RUNTIME
	3 SECONDS W/ REMOTE START	2	SHUTDOWN
#	HOLD FOR 3 SECONDS	5 LONG	CAR FINDER MODE
	PRESS AND RELEASE	STATUS	STATUS CHECK ON 2WAY

^{**} PLEASE SEE OWNERS GUIDE FOR DETAILED OPERATIONS AND FEATURES

SERVICE MODE / EMERGENCY OVERRIDE

TO AVOID SERIOUS INJURY, this remote start system must be set into Service Mode before <u>any under hood servicing is started</u>. Service Mode will prevent the vehicle from starting while the vehicle is being serviced. It is the sole responsibility of the vehicle's owner to place the system into Service Mode. The manufacture accepts no responsibility for accidental starting of the vehicle while the vehicle is being serviced.

ACTIVATING / DEACTIVATING VALET MODE / EMERGENCY OVERRIDE



Turn the Ignition Key ON (Leaving the key ON)



Press and hold the Valet switch for 8 to 15 seconds (Time depends on "Valet Settings" Program Option)



5 CHIRPS = OFF

REMOTE START AND ALARM DEACTIVATED

2 CHIRPS = ON

REMOTE START AND ALARM ACTIVATED

TRANSMITTER PROGRAMMING

TRANSMITTER PROGRAMMING

The system can lean up to 4 different remote's. Each remote to be used MUST be programmed together during the same sequence. For security, when a new remote is programmed all previous remote's are deleted. Please see remote operation chart for information on using Second Car / Pad Lock Operations.

ENTERING REMOTE PROGRAM MODE



Cycle the Ignition Key - ON/OFF ON/OFF ON (Leaving the key ON)



HOLD the program switch, the HORN will chirp ONCE and the park lights will turn on. (If the HORN does not chirp repeat step 1) CONTINUE TO HOLD until the HORN chirps 5 times



1 chirp confirms program mode entered followed by 5 chirps confirming transmitter program mode

PROGRAMMING REMOTE'S

- 4 Press & Release LOCK button on 1st Remote to be Programmed for Normal Operation <u>If remote(s) are to be programmed for "PADLOCK" (AM 1way Only) skip and goto step 6</u>
- 5 HORN will Chirp 1 time to confirm remote has been programmed (If the HORN does not chirp press button again)

REPEAT STEP 4 IF A SECOND REMOTE IS TO BE PROGRAMMED FOR NORMAL OPERATION



Press & Release BUTTON 4 on Remote to be Programmed for 2ND CAR OR PAD LOCK

7 - HORN will Chirp 1 time to confirm remote has been programmed (If the HORN does not chirp press button again)

To program 2nd car operation on 2way models enter transmitter program mode and turn the # icon on then program the transmitter to the vehicle. If the # icon is on the remote is in 2nd car operation.

REPEAT STEP 6 IF A SECOND REMOTE IS TO BE PROGRAMMED FOR 2ND CAR / PADLOCK OPERATION

8 -

Turn ignition key OFF to exit remote program mode when all required remote's have been programmed.

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MANUAL TRANSMISSION

INSTALL MANUAL

RESERVATION MODE

Manual transmission remote starters must be set into Reservation Mode before the remote starter will activate. The activation type of Reservation Mode is determined when the system is installed.

Auto Reservation Mode (Default)

- 1- While the vehicle is running, place into neutral and apply the park brake.
- 2*- Press and release the brake pedal twice. The park lights will flash twice,

the SIREN or HORN (opt.) will chirp twice and the doors will unlock (opt.).

- 3-Turn the ignition key off and the vehicle will continue running.
- 4**- Within 30 seconds, exit the vehicle and close all the doors. The vehicle will then shut off.

Manual Reservation Mode (Optional)

- **1-** While the vehicle is running with the key, place transmission into neutral and apply the park brake.
- **2-** Press and release the START button. The park lights will flash twice, the SIREN or HORN (opt.) will chirp twice and the doors will unlock (opt.).
- 3- Turn the ignition key off and the vehicle will continue running.
- 4- Exit the vehicle and close all the doors.
- 5**- Press and hold the START button for 3 seconds, the vehicle will then shut off.
- * If the park lights **do not** flash and stay on or the SIREN (HORN optional) chirps a third time, repeat **Step 2**.
- ** If the vehicle has dome light delay, the vehicle may stay running until the dome light turns off. This is normally no longer than 30 seconds.

TEST RESERVATION MODE

- 1) Press the start button on the remote without setting the Reservation Mode. The park lights should flash 4 times without starting the vehicle. If the vehicle starts THE WRONG REMOTE STARTER HAS BEEN INSTALLED!!!
- 2) Set the Reservation Mode then remote start the vehicle. Shut off with the remote wait 10 seconds then open the passenger door. Press Start on the remote and Reservation Mode should be cancelled. (4 flashes) if not, check for proper door pin connections.

*****FOR SAFETY REASONS ALL DOOR PINS INCLUDING THE REAR HATCH MUST BE CONNECTED.******

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INSTALL MANUAL

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DIAGNOSTICS CHART

If the remote starter does not activate when the start button is pressed the park lights will flash a diagnostic to indicate what shutdown input has been triggered. For example: If the start button is pressed the park lights flash 3 times slowly. Looking at the chart below this would indicate that the system is in Service Mode, simply follow the instructions listed in the owners manual on exiting Service Mode and the remote starter will begin to function as normal.

PARK LIGHTS	STATUS LED	DIAGNOSTIC CODE
3 Slow Flashes	LEDs "ON" Solid	System Is In Service Mode
4 Slow Flashes	Series of 4 Flashes	Not in Reservation Mode
5 Flashes	Series of 5 Flashes	Hood Open
5 Slow Flashes	Series of 5 Flashes	Ignition On During Start Attempt
6 Flashes	Series of 6 Flashes	Brake Pedal Shutdown

6 Flashes Series of 6 Flashes Brake Pedal St 7 Flashes Series of 7 Flashes Tach Lock-Out

8 Flashes Series of 8 Flashes 3 Start Attempts Without Starting

TO ENTER DIAGNOSTIC MEMORY

Step 1- Turn the ignition ON then OFF. Press and release the Program Button.

Step 2- The system will respond with three park light flashes and the HORN (optional) will honk the same number of times as the events in memory.

**** Maximum four events, four honks ****

I ED Flackes

NOTE: If the HORN does not honk, there are no events in memory.

Step 3- Press the Program Button once to view the last shut down code. The HORN (optional)will honk once to confirm code one.

**** If the HORN does not honk, there are no codes in memory.****

Diammostic

Step 4- The LEDs on the antenna will flash a code corresponding to a shut down trigger. Press the Program Button again for the second code.

*** The HORN will honk twice to confirm code two three time for code three... ***

Step 5- To **Clear Diagnostic Memory.** While in Diagnostic Mode press and hold the Program Button for five seconds. The park lights will flash and the HORN (optional) will honk once.

****Once diagnostic memory has 4 shutdown events in memory, the system will not record any further shutdown events until the system memory has been cleared.****

Diagnostic
The system was shutdown by the brake switch input
The system was shutdown by the hood pin input
The system did not detect the Tach signal.
The system made 3 start attempts without starting

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PAGE 31 NOTES INSTALL MANUAL

**FOR DETAILED VEHICLE WIRING INFORMATION GO TO: http://www.ultrastarters.com/wiring_diagrams.html

This site is for registered and authorized dealer only.

If you are an authorized dealer but have been registered, please fill out the service request form at http://www.ultrastarters.com/wiring_diagrams.html

> PRODUCT INFORMATION: www.ultrastarters.com TECHNICAL SUPPORT: support@ultrastarters.com ORDERING: orders@ultrastarters.com

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